

APPENDIX A - AUTHORIZED EQUIPMENT LIST
Office for Domestic Preparedness
FY 2004 State Homeland Security Program

The foundation of the FY 2004 SHSP authorized equipment list (AEL) is the Standardized Equipment List (SEL), which was developed by the Interagency Board (IAB) for Equipment Standardization and Interoperability. Changes and additions to the AEL reflect input received by the DHS-ODP from State and local responders and reflect a continued commitment to better serve the nation. The new AEL also comports closely with the SEL, but has additional categories and equipment. A cross-section of officials representing the U.S. Department of Homeland Security, the U.S. Department of Justice, the Public Health Service, the U.S. Department of Energy, and State and local CBRNE response experts assisted in the development of this authorized equipment purchase list and in identifying unallowable items.

The following list is intended as a guide. If State agencies and local units of government have questions about eligibility of equipment not specifically addressed below, the SAA must contact the assigned DHS-ODP Preparedness Officer for clarification.

Authorized equipment purchases may be made in the following categories:

1. Personal Protective Equipment (PPE)
2. Explosive Device Mitigation and Remediation Equipment
3. CBRNE Search and Rescue Equipment
4. Interoperable Communications Equipment
5. Detection Equipment
6. Decontamination Equipment
7. Physical Security Enhancement Equipment
8. Terrorism Incident Prevention Equipment
9. CBRNE Logistical Support Equipment
10. CBRNE Incident Response Vehicles
11. Medical Supplies and Limited Types of Pharmaceuticals
12. CBRNE Reference Materials
13. Agricultural Terrorism Prevention, Response and Mitigation Equipment
14. CBRNE Response Watercraft
15. CBRNE Aviation Equipment
16. Cyber Security Enhancement Equipment
17. Intervention Equipment
18. Other Authorized Equipment

1. Personal Protective Equipment - Equipment worn to protect the individual from hazardous materials and contamination. Levels of protection vary and are divided into categories based on the degree of protection afforded. The following constitutes equipment intended for use in a chemical/biological threat environment:

Level A. Fully encapsulated, liquid and vapor protective ensemble selected when the highest level of skin, respiratory, and eye protection is required. The following constitutes Level A equipment for consideration:

- Fully Encapsulated Liquid and Vapor Protection Ensemble, reusable or disposable (tested and certified against CB threats)
- Fully Encapsulated Training Suits
- Closed-Circuit Rebreather (minimum 2-hour supply, preferred), or open-circuit Self-Contained Breathing Apparatus (SCBA) or, when appropriate, Air-Line System with 15-minute minimum escape SCBA
- Spare Cylinders/Bottles for rebreathers or SCBA and service/repair kits
- Chemical Resistant Gloves, including thermal, as appropriate to hazard
- Personal Cooling System; Vest or Full Suit with support equipment needed for maintaining body core temperature within acceptable limits
- Hardhat/helmet
- Chemical/Biological Protective Undergarment
- Inner Gloves
- Approved Chemical Resistant Tape
- Chemical Resistant Boots, Steel or Fiberglass Toe and Shank
- Chemical Resistant Outer Booties

Level B. Liquid splash resistant ensemble used with highest level of respiratory protection. The following constitute Level B equipment and should be considered for use:

- Liquid Splash Resistant Chemical Clothing, encapsulated or non-encapsulated
- Liquid Splash Resistant Hood
- Closed-Circuit Rebreather (minimum 2-hour supply, preferred), open-circuit SCBA, or when appropriate, Air-Line System with 15-minute minimum escape SCBA
- Spare Cylinders/Bottles for rebreathers or SCBA and service/repair kits
- Chemical Resistant Gloves, including thermal, as appropriate to hazard
- Personal Cooling System; Vest or Full Suit with support equipment needed for maintaining body core temperature within acceptable limits
- Hardhat/helmet
- Chemical/Biological Protective Undergarment
- Inner Gloves
- Approved Chemical Resistant Tape
- Chemical Resistant Boots, Steel or Fiberglass Toe and Shank
- Chemical Resistant Outer Booties

Level C. Liquid splash resistant ensemble, with same level of skin protection of Level B, used when the concentration(s) and type(s) of airborne substances(s) are known and the criteria for using air-purifying respirators are met. The following constitute Level C equipment and should be considered for use:

- Liquid Chemical Splash Resistant Clothing (permeable or non-permeable)
- Liquid Chemical Splash Resistant Hood (permeable or non-permeable)
- Tight-fitting, Full Facepiece, Negative Pressure Air Purifying Respirator with the appropriate cartridge(s) or canister(s) and P100 filter(s) for protection against toxic industrial chemicals, particulates, and military specific agents.
- Tight-fitting, Full Facepiece, Powered Air Purifying Respirator (PAPR) with chemically resistant hood with appropriate cartridge(s) or canister(s) and high-

efficiency filter(s) for protection against toxic industrial chemicals, particulates, and military specific agents.

- Closed-Circuit Rebreather (minimum 2-hour supply, preferred), open-circuit SCBA, or when appropriate, Air-Line System with 15-minute minimum escape SCBA
- Spare cylinder/bottles for rebreathers or SCBA
- SCBA Service and repair kits
- Equipment or system batteries will include those that are rechargeable (e.g. NiCad) or non-rechargeable with extended shelf life (e.g. Lithium)
- Chemical Resistant Gloves, including thermal, as appropriate to hazard
- Personal Cooling System; Vest or Full Suit with support equipment
- Hardhat
- Inner Chemical/Biological Resistant Garment
- Inner Gloves
- Chemical Resistant Tape
- Chemical Resistant Boots, Steel or Fiberglass Toe and Shank
- Chemical Resistant Outer Booties

Level D. Selected when no respiratory protection and minimal skin protection is required, and the atmosphere contains no known hazard and work functions preclude splashes, immersion, or the potential for unexpected inhalation of, or contact with, hazardous levels of any chemicals.

- Escape mask for self-rescue

Note: During CBRNE response operations, the incident commander determines the appropriate level of personal protective equipment. As a guide, Levels A, B, and C are applicable for chemical/ biological/ radiological contaminated environments. Personnel entering protective postures must undergo medical monitoring prior to and after entry

All SCBAs **must** meet standards established by the National Institute for Occupational Safety and Health (NIOSH) for occupational use by emergency preparedness and response personnel when exposed to Chemical, Biological, Radiological and Nuclear (CBRN) agents in accordance with Special Tests under NIOSH 42 CFR 84.63(c), procedure number RCT-CBRN-STP-0002, dated December 14, 2001. *Grant recipients **must** purchase: 1) protective ensembles for chemical and biological terrorism incidents that are certified as compliant with Class 1, Class 2, or Class 3 requirements of National Fire Protection Association (NFPA) 1994, Protective Ensembles for Chemical/Biological Terrorism Incidents; 2) protective ensembles for hazardous materials emergencies that are certified as compliant with NFPA 1991, Standard on Vapor Protective Ensembles for Hazardous Materials Emergencies, including the chemical and biological terrorism protection; 3) protective ensembles for search and rescue or search and recovery operations where there is no exposure to chemical or biological warfare or terrorism agents and where exposure to flame and heat is unlikely or nonexistent that are certified as compliant with NFPA 1951, Standard on Protective Ensemble for USAR Operations; and, 4) protective clothing from blood and body fluid pathogens for persons providing treatment to victims after decontamination that are certified as compliant with NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations.* 20 For more information regarding these standards, please refer to the following web sites: The National Fire Protection Association - <http://www.nfpa.org>

2. Explosive Device Mitigation and Remediation - Equipment providing for the mitigation and remediation of explosive devices in a CBRNE environment:

- Bomb Search Protective Ensemble for Chemical/Biological Response
- Chemical/Biological Undergarment for Bomb Search Protective Ensemble
- Cooling Garments to manage heat stress
- Ballistic Threat Body Armor (not for riot suppression)
- Ballistic Threat Helmet (not for riot suppression)
- Blast and Ballistic Threat Eye Protection (not for riot suppression)
- Blast and Overpressure Threat Ear Protection (not for riot suppression)
- Fire Resistant Gloves
- Bomb blanket, Bomb Suppression Blanket, explosive devices blanket
- Dearmer/Disrupter
- Real Time X-Ray Unit; Portable X-Ray Unit
- CBRNE Compatible Total Containment Vessel (TCV)
- CBRNE Upgrades for Existing TCV
- Robot; Robot Upgrades
- Fiber Optic Kit (inspection or viewing)
- Tents, standard or air inflatable for chem/bio protection
- Inspection mirrors
- Ion Track Explosive Detector

3. CBRNE Search and Rescue Equipment - Equipment providing a technical search and rescue capability for a CBRNE environment:

- Hydraulic tools; hydraulic power unit
- Listening devices; hearing protection
- Search cameras (including thermal and infrared imaging)
- Breaking devices (including spreaders, saws, and hammers)
- Lifting devices (including air bag systems, hydraulic rams, jacks, ropes, and block and tackle)
- Blocking and bracing materials
- Evacuation stretchers, baskets, and chairs (for evacuation of disabled personnel)
- Ventilation fans
- Rescue ropes and ladders (including rescue pulley systems)
- Confined Space Kits (such as MSA Watchman)
- Underwater equipment including: lights, metal detectors, communication and video units, lift bags, water rescue helmets, ice hooks, buoyancy compensator, and underwater scooter/DPV
- SCUBA equipment including: exposure and pressurized suites, face masks, regulators, air tanks, and pony bottles.

4. Interoperable Communications Equipment - Equipment and systems providing connectivity and electrical interoperability between local and interagency organizations to coordinate CBRNE response operations. When utilizing ODP program funds in the category of Interoperable Communications Equipment to build, upgrade, enhance, or replace

communications systems, grantees and sub-grantees should develop a comprehensive interoperable communications plan before procurement decisions are made. Guidance for development of interoperable communications plans is provided in **Appendix E**.

- Land Mobile, Two-Way In-Suit Communications (secure, hands-free, fully duplex, optional), including air-to-ground capability (as required)
- Antenna and tower systems
- Leasing and rental of tower space
- Personnel Alert Safety System (PASS) - (location and physiological monitoring systems optional)
- Personnel Accountability Systems
- Individual/portable radios, software radios, portable repeaters, radio interconnect systems, satellite phones, batteries, chargers and battery conditioning systems
- Computer systems designated for use in an integrated system to assist with detection and communication efforts (must be linked with integrated software packages designed specifically for chemical and/or biological agent detection and communication purposes)
- Aviation and maritime security voice and data transmission equipment
- Portable Meteorological Station (monitors temperature, wind speed, wind direction and barometric pressure at a minimum)
- Computer aided dispatch systems and enhancement of 911 systems, and mobile computer data systems to include pagers, palm pilots, and cell phones
- Commercially available crisis management software
- Mobile Display Terminals

Note: In an effort to improve emergency preparedness and response interoperability, all new or upgraded radio systems and new radio equipment should be compatible with a suite of standards called ANSI/TIA/EIAA-102 Phase I (Project 25). These standards have been developed to allow for backward compatibility with existing digital and analog systems and provide for interoperability in future systems. The FCC has chosen the Project 25 suite of standards for voice and low-moderate speed data interoperability in the new nationwide 700 MHZ frequency band. The Integrated Wireless Network (IWN) of the U.S. Justice and Treasury Departments has also chosen the Project 25 suite of standards for their new radio equipment. In an effort to realize improved interoperability, all radios purchased under this grant should be APCO 25 compliant.

5. Detection Equipment - Equipment to sample, detect, identify, quantify, and monitor for chemical, biological, radiological/nuclear, and explosive agents throughout designated areas or at specific points, including equipment necessary to enhance laboratory detection capabilities:

Chemical

- M-8 Detection Paper for chemical agent identification
- M-9 Detection Paper (roll) for chemical agent (military grade) detection
- M-256 Detection Kit for Chemical Agent (weapons grade—blister: CX/HD/L; blood: AC/CK; and nerve: GB/VX) detection
- M-256 Training Kit
- M-18 Series Chemical Agent Detector Kit for surface/vapor chemical agent analysis
- Hazard Categorizing (HAZCAT) Kits

- Photo-Ionization Detector (PID)
- Flame Ionization Detector (FID)
- Surface Acoustic Wave Detector
- Gas Chromatograph/Mass Spectrometer (GC/MS)
- Ion Mobility Spectrometry
- Stand-Off Chemical Detector
- M-272 Chemical Agent Water Test Kit
- Colormetric Tube/Chip Kit specific for TICs and CBRNE applications
- Multi-gas Meter with minimum of O2 and LEL
- Leak Detectors (soap solution, ammonium hydroxide, etc)
- pH Paper/pH Meter
- Waste Water Classifier Kit
- Oxidizing Paper
- Protective cases for sensitive detection equipment storage and transport

Biological

- Point Detection Systems/Kits (Immunoassay or other technology)

Radiological/Nuclear

- Radiation detection equipment (electronic or other technology that detects alpha, beta, gamma, and high intensity gamma)
- Personal Dosimeter
- Scintillation Fluid (radiological) pre-packaged
- Radiation monitors

Explosive

- Canines (initial acquisition and initial operational capability only)

6. Decontamination Equipment - Equipment and material used to clean, remediate, remove or mitigate chemical and biological contamination:

Chemical

- Decontamination system for individual and mass application with environmental controls, water heating system, showers, lighting, and transportation (trailer)
- Decon Litters/roller systems
- Extraction Litters, rollable
- Runoff Containment Bladder(s), decontamination shower waste collection with intrinsically-safe evacuation pumps, hoses, connectors, scrub brushes, nozzles
- Spill Containment Devices
- Overpak Drums
- Non-Transparent Cadaver Bags (CDC standard)
- Hand Carts
- Waste water classification kits/strips

Biological

- HEPA (High Efficiency Particulate Air) Vacuum for dry decontamination

7. Physical Security Enhancement Equipment - Equipment to enhance the physical security of critical infrastructure.

Surveillance, Warning, Access/Intrusion Control

Ground

- Motion Detector Systems: Acoustic; Infrared; Seismic; Magnetometers
- Barriers: Fences; Jersey Walls
- Impact Resistant Doors and Gates
- Portal Systems; locking devices for access control
- Alarm Systems
- Video Assessment/Cameras: Standard, Low Light, IR, Automated Detection
- Personnel Identification: Visual; Electronic; Acoustic; Laser; Scanners; Cyphers/Codes
- X-Ray Units
- Magnetometers
- Vehicle Identification: Visual; Electronic; Acoustic; Laser; Radar

Waterfront

- Radar Systems
- Video Assessment System/Cameras: Standard, Low Light, IR, Automated Detection
- Diver/Swimmer Detection Systems; Sonar
- Impact Resistant Doors and Gates
- Portal Systems
- Hull Scanning Equipment
- Plus all those for Ground Vessel Barriers

Sensors – Agent/Explosives Detection

- Chemical: Active/Passive; Mobile/Fixed; Handheld
- Biological: Active/Passive; Mobile/Fixed; Handheld
- Radiological
- Nuclear
- Ground/Wall Penetrating Radar

Inspection/Detection Systems

- Vehicle and Cargo Inspection System – Gamma-ray
- Mobile Search and Inspection System – X-ray
- Non-Invasive Radiological/Chem/Bio/Explosives System – Pulsed Neutron Activation

Explosion Protection

- Blast/Shock/Impact Resistant Systems
- Protective Clothing
- Column and Surface Wraps; Breakage/Shatter Resistant Glass; Window Wraps
- Robotic Disarm/Disable Systems

Support Equipment for Continuation of Critical Infrastructure Operations

- Large fixed generators
- Fuel storage containers
- Back-up operating computer hardware and programming software
- Self-monitoring sensors and alarms

8. Terrorism Incident Prevention Equipment (Terrorism Early Warning, Prevention, and Deterrence Equipment and Technologies) - State and local emergency preparedness, prevention and response agencies will increasingly rely on the integration of emerging technologies and equipment to improve jurisdictional capabilities to deter and prevent terrorist incidents. This includes, but is not limited to, equipment and associated components that enhance a jurisdiction's ability to disseminate advanced warning information to prevent a terrorist incident or disrupt a terrorist's ability to carry out the event, including information sharing, threat recognition, and public/private sector collaboration.

- Data collection/information gathering software
- Data synthesis software
- Geographic Information System (GIS) information technology and software
- Law enforcement surveillance equipment
- GIS plotter software and printers
- Joint Regional Information Exchange System (JRIES)
- Alert and notification equipment that allows for real-time dissemination of information and intelligence. Examples of this equipment include cellular phones, pagers, text messaging, etc.
- Hardware, software and internet-based systems that allow for information exchange and dissemination
- Fees for use of databases containing terrorist threat information
- Facial recognition hardware and software

9. CBRNE Logistical Support Equipment - Logistical support gear used to store and transport the equipment to the CBRNE incident site and handle it once onsite. This category also includes small support equipment including intrinsically safe (nonsparking) hand tools required to support a variety of tasks and to maintain equipment purchased under the grant, as well as general support equipment intended to support the CBRNE incident response. The State should also consider procurement of software to assist in tracking and maintaining statewide equipment assets.

- Equipment trailers
- Staging tents and portable shelter units
- Weather-tight containers for equipment storage
- Software for equipment tracking and inventory
- Handheld computers for Emergency Response applications
- Small hand tools
- Binoculars, head lamps, range finders and spotting scopes (not for weapons use)
- Night vision goggles
- Light and heavy duty generators to operate search and rescue equipment, light sets, water pumps for decontamination sets
- Light sets for nighttime operations/security (including emergency light poles)
- Electrical current detectors and DC to AC inverter equipment

- Equipment harnesses, belts, and vests (including incident command vests)
- Isolation containers for suspected chemical/biological samples
- Bull horns and other PA systems
- Traffic and crowd control devices (traffic and reflective cones, arrow and zone signs, portable barriers)
- Water pumps for decontamination systems
- Bar code scanner/reader for equipment inventory control
- Badging system equipment and supplies
- Cascade system for refilling SCBA oxygen bottles
- SCBA fit test equipment and software to conduct flow testing
- Testing equipment for fully encapsulated suits and respirators
- Cooling/heating/ventilation fans (personnel and decontamination tent use)
- HAZMAT gear bag/box

10. CBRNE Incident Response Vehicles - This category includes special-purpose vehicles for the transport of CBRNE response equipment and personnel to the incident site. Licensing and registration fees are the responsibility of the jurisdiction and are not allowable under this grant. In addition, general-purpose vehicles (squad cars, executive transportation, etc.), fire apparatus, and non-CBRNE tactical/armored assault vehicles are not allowable. Allowable vehicles include:

- Mobile command post vehicles
- Hazardous materials (HazMat) response vehicles
- Bomb response vehicles
- Prime movers for equipment trailers
- 2-wheel personal transport vehicles for transporting fully suited bomb technicians, Level A/B suited technicians to the Hot Zone
- Multi-wheeled all terrain vehicles for transporting personnel and equipment to and from the hot zone
- Mobile Command Unit
- Mobile Morgue Unit
- Response vehicles to deploy bomb, hazmat, and special weapons personnel, equipped to detect chemical, biological and radiological materials; these vehicles may be armored to protect these personnel from explosions and projectiles when required to enter hot zones.

11. Medical Supplies and Pharmaceuticals - Medical supplies and pharmaceuticals required for response to a CBRNE incident at the advanced life support level. Grantees are responsible for replenishing items after shelf-life expiration date(s).

Medical Supplies

- Automatic biphasic external defibrillators and carry bags
- Equipment and supplies for establishing and maintaining a patient airway (to include OP and NG airways; ET tubes, styletes, blades, and handles; portable suction devices and catheters; and stethoscopes for monitoring breath sounds)
- Blood pressure cuffs
- IV administration sets (macro and micro) and pressure infusing bags
- IV catheters (14, 16, 18, 20, and 22 gauge)

- IV catheters (Butterfly 22, 24 and 26 gauge)
- Manual biphasic defibrillators (defibrillator, pacemaker, 12 lead) and carry bags
- Eye lens for lavage or continuous medication
- Morgan eye shields
- Nasogastric tubes
- Oxygen administration equipment and supplies (including bag valve masks; rebreather and non-rebreather masks, and nasal cannulas; oxygen cylinders, regulators, tubing, and manifold distribution systems; and pulse oximetry, Capnography and CO2 detection devices)
- Portable ventilator
- Pulmonary fit tester
- Syringes (3cc and 10cc)
- 26 ga ½" needles (for syringes)
- 21 ga. 1 ½ " needles (for syringes)
- Triage tags and tarps
- Sterile and non-sterile dressings, all forms and sizes
- Gauze, all sizes
- Burn kits

Pharmaceuticals

- 2Pam Chloride
- Adenosine
- Albuterol Sulfate .083%
- Albuterol MDI
- Atropine 0.1 & 0.4 mg/ml
- Atropine Auto Injectors
- Benadryl
- CANA Auto Injectors
- Calcium Chloride
- Calcium Gluconate 10%
- Ciprofloxin PO
- Cyanide kits
- Dextrose
- Dopamine
- Doxycycline PO
- Epinephrine
- Glucagon
- Lasix
- Lidocaine
- Loperamide
- Magnesium Sulfate
- Methylprednisolone
- Narcan
- Nubain
- Nitroglycerin
- Normal Saline (500 and 1000 ml bags)
- Potassium Iodide

- Silver Sulfadiazine
- Sodium Bicarbonate
- Sterile Water
- Tetracaine
- Thiamine
- Valium

12. CBRNE Reference Materials - Reference materials and software designed to assist emergency preparedness and response personnel in preparing for and responding to a CBRNE incident. This includes but is not limited to the following:

- NFPA Guide to hazardous materials
- NIOSH Hazardous Materials Pocket Guide
- North American Emergency Response Guide
- Jane's Chem-Bio Handbook
- First Responder Job Aids

13. Agricultural Terrorism Prevention, Response and Mitigation Equipment -

Equipment used for agricultural terrorism prevention, response and/or mitigation. DHSODP expanded the scope of its programs based on feedback from its constituency. To that end, an agricultural section has been incorporated into the State Homeland Security Assessment and Strategy and grant programs to assist with preventing, responding to, and recovering from agro-terrorism events. In addition to the following categories, any of the equipment items from the authorized equipment list (AEL) maybe used for agricultural homeland security efforts.

Animal Restraint

- Probangs
- Nose leads
- Lariat
- Hog snare
- Portable cattle and hog chutes
- Knee boards
- Hog paddles
- Electric prods
- Halters
- Swine mouth speculum
- Panels
- Portable pens, crates, kennels
- Leashes

Diagnostic Equipment

- Biohazard packing container
- Blood sampling supplies (needles, syringes, blood tubes)
- Biohazard bags and containers
- Sharps containers
- Animal identification supplies (back tags, marker crayons, waterproof tape and pens)

- Specimen containers
- Ice packs for shipping and access to freezer

Cleaning, Disinfection, and Fumigation

- Bleach
- Potassium bromide
- Other surface and topical disinfectants
- Soda ash
- Sodium hydroxide and vinegar

Disposal Equipment and Supplies

- Draglines
- Heavy plastic liners

Burning and Incinerating Supplies

- Clean fuel oil and other incineration materials
- Portable incinerators

Depopulation

- Euthanasia solution
- Captive bolt pistol (appropriate gauge)
- Lining and covering for buried waste

General

- Euthanasia guidelines
- Animal handling guidelines
- Quarantine forms
- Plastic file boxes or filing cabinets
- Chisel
- Disposable scalpels/blades
- Surgical scissors
- Pliers
- Forceps
- Identification system for animals
- Reference materials for specific animal management in disasters/agroterrorism

14. CBRNE Prevention & Response Watercraft – This category allows for the purchase of surface boats and vessels **for port homeland security purposes**, including prevention and response. Allowable costs also include the purchase of customary and specialized navigational, communications, safety, and operational equipment necessary to enable such watercraft to carry out their homeland security mission.

Licensing, registration fees, insurance, and all ongoing operational expenses are the responsibility of the grantee or the local units of government and are not allowable under this grant.

15. CBRNE Aviation Equipment – This category allows for the purchase of special purpose aviation equipment where such equipment will be utilized primarily for homeland security

objectives and permissible program activities, and provides that the local units of government certified that it has an operating aviation unit and that the costs for operation and maintenance of such equipment will be paid from non-grant funds. Aviation equipment is defined as fixed-wing aircraft, helicopters, and air-safety containers for CBRNE prevention, response, mitigation and/or remediation. Allowable costs include the purchase of customary and specialized navigational, communications, safety, and operational equipment necessary for CBRNE prevention, response and/or recovery.

Prior to obligating funds for this category of equipment, grantees must obtain a waiver from Department of Homeland Security Secretary through ODP by first consulting with their DHS-ODP Preparedness Officer and providing a detailed justification for obligating funds in this category, and receiving approval to obligate funds.

Licensing, registration fees, insurance, and all ongoing operational expenses are the responsibility of the grantee or the local units of government and are not allowable under this grant. In addition, the purchases of general-purpose public safety aircraft such as, but not limited to, firefighting planes or police helicopters are not allowable. Furthermore, local units of government, including State agencies, must certify that they have an operating aviation unit and that no expenses will be charged against the grant award for the operation of such aviation unit. Also prohibited is aviation equipment acquisition that is inconsistent with the State's updated homeland security assessment and strategy.

16. Cyber Security Enhancement Equipment

- Intrusion detection devices and systems
- Configuration management and patch dissemination tools
- Scanning and penetration tools
- Geographic information systems
- Encryption systems
- Firewall and authentication technologies
- Network traffic monitoring and analysis systems
- Security hardware and software countermeasures to protect against cyber attacks

17. Intervention Equipment – this category allows for the purchase of specialized law enforcement equipment that is necessary to further enhance their capabilities to prevent domestic terrorism incidents. Grantees are reminded that they must comply with 28 CFR, Parts 66 and 70. In addition, when procuring any Title III equipment, grantees must strictly adhere to requirements of 18 U.S.C., Part I, Chapter 119, Section 2512, pertaining to the manufacture, distribution, possession, and advertising of wire, oral, or electronic communications interception devices. This category includes but is not limited to the following:

- Tactical entry equipment (not including weapons)
- Title III Equipment (Pin registers)
- Specialized response vehicles and vessels

18. Other Authorized Equipment and Related Costs

- Installation costs for authorized equipment purchased through ODP grants

- Maintenance contracts for authorized equipment purchased through ODP grants and acquired through DHS-ODP'S's Homeland Defense Equipment Reuse (HDER) Program
- Multiple Integrated Laser Engagement System (MILES)
- Training on CBRNE and cyber security equipment by vendors or local entities – DHS encourages the use of Domestic Preparedness Equipment Technical Assistance Program (DPETAP) for equipment training; however, manufacturer/vendor equipment training, the cost of overtime to attend the training, and costs related to having vendors provide training on equipment to State and/or local units of government is allowed to facilitate the training on and fielding of equipment.
- Shipping costs for equipment
- Sales tax on equipment

APPENDIX E

Guidance for Development of Interoperable Communications Plans

When utilizing ODP program funds in the category of Interoperable Communications Equipment to build, upgrade, enhance, or replace communications systems, grantees and sub-grantees should develop a comprehensive interoperable communications plan before procurement decisions are made. Plans should be retained by the jurisdiction/agency and be available for review by the State Administrative Agency (SAA) and ODP. The plan should address, as appropriate, the areas of:

- *Building* public safety communication systems
- *Upgrading/enhancing* public safety communication systems and equipment
- *Replacing* public safety communication systems and equipment
- *Maintaining* public safety communication systems and equipment
- *Training* public safety staff on issues related to emergency response communications
- *Managing* public safety communications projects

The following considerations should be made when developing a communications plan:

- Has the grantee already completed a plan that illustrates the agency's/jurisdiction's commitment to public safety communication priorities?
 - Obtain/retain an executive summary that clearly illustrates how the proposed effort will lead to enhanced public safety communications interoperability.
 - What type of multi-jurisdictional or multidisciplinary agreements does the agency possess (i.e., MOUs, interstate compacts, mutual aid agreements)?
- Has the grantee considered public safety's operational needs of the communications equipment?
 - In what type of topography/terrain does the agency operate?
 - In what types of structures does the agency need to communicate? (i.e., tunnels, high-rise buildings)
 - What methods of communication does the agency use? (i.e., email, paging, cellular calls, portable radio communications)
 - What is the process for dispatching calls?
 - Is the communications center independently owned and operated by the agency? Does it serve several public safety agencies in the jurisdiction? Is it a multi-agency, multi-jurisdictional facility?
 - Does the agency have the ability to patch across channels? If so, how many patches can be simultaneously set up? Is a dispatcher required to set up and break the patches down?
 - What is the primary radio language used by the agency when communicating with other agencies or organizations? (i.e. 'plain' English, code)
 - What types of equipment can immediately be deployed to provide short-term solutions for improved communications?
- Has the grantee considered the system requirements to ensure interoperability with systems used by other disciplines or other levels of government?
 - What type of equipment is currently used by the agency?

- Is there a regional, multi-jurisdictional, or statewide system in place that requires interoperability in order to communicate with other agencies? If so, how do you plan on interoperating/connecting to that system?
- Is the equipment compatible with the Project 25 suite of standards?
- For data-related systems, is the grantee using XML standards?
- How scalable is the system? Can it be used locally between agencies and jurisdictions, statewide, and at multi-state or national level?
- What internal and external security requirements exist in the architecture to secure information and maintain privacy levels for data as required by law?
- Is the infrastructure shared with any other agency or organization? Is it owned or leased?
- Does the agency use analog or digital radio systems or both?
- Is the system conventional or trunked?
- Which radio frequencies are used to communicate with other public safety agencies?
- How many channels does the agency have solely designated for communication with other agencies?